

HABITAT CONSERVATION PLAN
Technical Advisory Committee
June 20, 2006. 9am – Noon
Arizona Game and Fish Department Conference Room
555 North Greasewood Road
Tucson, Arizona 85745-3612

MEETING SUMMARY

Attendees: Guy McPherson, Trevor Hare, Ann Phillips, Rich Glinski, Linwood Smith, Lori Anderson (Coalition for Sonoran Desert Protection), Ries Lindley (Tucson Water Department), Cathy Crawford (AFGD), Sonya Kazaros (Arizona State Land Department), Leslie Liberti (City of Tucson – Office of Conservation and Sustainable Development), Jessica Lee and Geoff Soroka (SWCA)

Update on Recent SAC Meetings/Upcoming Meetings

- a. *Scheduled TAC Meetings:*
- July 18, 9am-Noon @ AGFD.
 - August 1, 9am-11am @ AGFD.
 - August 15, 9am-11am @ AGFD.

1) Old Business

- a. *Meeting Minutes – May 16, 2006*

Leslie said that the May 16 meeting minutes would be sent to the TAC soon.

- b. *Update on Buffelgrass*

Leslie explained to the TAC that the IGA for the Segment 2 grant would be on the agenda for the June 21, 2006 Mayor and Council meeting. She noted that Denise Kendall, a contaminants expert with U.S. Fish and Wildlife Service (USFWS), is still working on the Environmental Assessment (EA) for the buffelgrass treatment program for “A” Mountain and Tumamoc Hill. Leslie explained that there was some disagreement about whether the USFWS contaminants expert should prepare a full EA, or simply complete a Categorical Exclusion (“CatEx”). She noted that if USFWS proceeded with an EA, the earliest that grant money could be received to start work on buffelgrass eradication would be August 7, 2006. Travis Bean had noted that the average monsoon start date over the past decade has been August 15, and that there are predictions that the rains could arrive early this year. She said that the City and County would like to spray immediately after the buffelgrass greens up, and noted that Travis Bean (University of Arizona Desert Lab) stressed that he would like to see a “CatEx” completed, in order to have the flexibility to spray herbicide sooner than August 7. The “CatEx” would enable money to be used before August 7. Ries added that the buffelgrass has to be in a growing state in order to absorb the herbicide. Linwood added

that Julio Betancourt has noted that there is a two-week window between initial green-up and when the buffelgrass stops growing for sprayed herbicide to be effective.

Leslie explained that the difference between an EA and "CatEx" is that the EA has a required 30-day public comment period. She said that the City is prepared to issue a press release on June 21, 2006 regarding the buffelgrass eradication proposal for "A" Mountain and Tumamoc Hill, noting that the public needs to be told that a temporary effect of the herbicide spraying is that it will leave the mountains a faint blue color for a while. Leslie said that the City has pledged to meet with local neighborhood groups to explain the buffelgrass management program, and that she would be glad to attend any other similar meetings. The TAC asked Leslie if it was possible to take the work already done for the EA and turn it into a "CatEx" Trevor noted that including an EA in a "CatEx" is not that uncommon because the only main difference is that it lacks a formal comment period. Leslie said that she would check on this, and stressed that the City is committed to doing public outreach, regardless of whether they take the EA route. Cathy noted that if the City does public outreach in addition to the "CatEx", it would be fulfilling the spirit of the NEPA process.

Rich asked if spraying buffelgrass really needed to be done this year, perhaps the eradication program could be put off for a year in order to give the City time to commit to gaining full public support. Leslie said that one reason to do the eradication this year is that buffelgrass is a very visible topic in the City and has the attention of Mayor and Council. Also, Pima County has made the commitment to provide money for the program this year. She noted that Travis believes that if we wait, a lot of the progress that has been made to secure funding and support may be undone. This program would also provide a visible example of the efforts being made to combat invasive species, coinciding with the establishment of the Pima-Santa Cruz Cooperative Weed Management Area (CWMA). Guy noted that the buffelgrass problem would only intensify the longer we wait. Leslie noted that Tucson Water is moving forward with their buffelgrass management program in Avra Valley with Department money, avoiding the need to comply with the NEPA process. Ann asked Leslie if there is enough information in the current draft of the EA to distribute to the community as a way to establish a *de facto* public comment period. Leslie said yes, pending whether USFWS was prepared to release the draft EA as a public document. Guy said that he supports the "CatEx" because he does not think that completing the EA would highlight any new technical or scientific information that the TAC does not already know, and that the EA would open a door to litigation. However, he also does not believe that waiting until August 7 would be a problem because buffelgrass would continue to grow and green-up throughout the monsoons, even into September. Ann said that she wants her vote to defer to what Travis believes is the right thing to do, because he has the most expertise on the buffelgrass green-up. She also noted that Travis says that sometimes buffelgrass can green-up twice a year, a second time in the autumn, but that it is dependent on rainfall. Leslie said that she is not sure if the County would want to postpone their efforts and funding for another year. Rich stressed that, while he agrees with Guy that the EA would likely not highlight any new technical information, the issue revolves around the public's emotions regarding the issue. He noted that it is likely that the buffelgrass infestation on the mountains cannot get worse, so perhaps it would be better to postpone the program until adequate public outreach could be accomplished.

The TAC agreed that it would be wiser to go ahead and complete the EA. Cathy suggested that the Avra Valley buffelgrass eradication efforts could be used as an example for the community. Ann added that perhaps a small, symbolic trial could be done on "A" Mountain in order to help people feel more comfortable with herbicide application. Leslie noted that there was not much public criticism generated by the *Tucson Weekly* article on buffelgrass eradication. She said that her office has also received many calls about how neighborhoods are working on the issue locally. She noted that Denise Kendall would be getting a tour of "A" Mountain and Tumamoc Hill today. She said that she would discuss the TAC's decision to do an EA with Travis, and that if he had strong concerns, he could email the group listserv. Leslie reviewed the major points in the draft EA. Trevor noted that effects to the Tumamoc globeberry should still be considered. Rich asked if dead buffelgrass would increase the fire danger. Guy said that he believes that the fire danger would increase over the next couple of years. Ann noted that for reseeding the mountains, she would prefer a site-specific seed mix, which should be easy to achieve, as the area is part of the research station. Leslie noted that the EA does not discuss reseeding. She said that the EA specifies that one pound of active herbicide ingredient would be used per acre.

2) New Business

- a. *Update on Segment 1 surveys and discussion of needed surveys for Segment 2 and beyond*

Leslie explained that the TAC needs to decide how to spend research grant money for the upcoming fiscal year. She handed out information that detailed the proposed HCP surveys/studies for the next year, including: the bioaccumulation study of the western burrowing owl in Avra Valley; seed bank monitoring in Avra Valley; seed trapping in Avra Valley; buffelgrass mapping; vegetation monitoring in Avra Valley; restoration trials in Avra Valley; cacti surveys in the expanded Southlands; Santa Cruz River assessment; and surveys near Cienega Creek. Cathy explained that AGFD cannot do the burrowing owl survey this year, because it was not detailed in the grant proposal a few months ago, but it could be a study to think about doing in Segment 3. Trevor suggested that perhaps Courtney Conway (University of Arizona) could conduct the burrowing owl survey this year. Leslie said that the seed bank survey is estimated to cost \$6,000 per year, for four years. She noted that for the seed trapping study, Mima Falk (USFWS) never was able to establish contact with Todd Esque (USGS) to discuss it with him. Trevor suggested looking for someone else to do the study, because he feels that this one is more important than the seed bank study because buffelgrass seeds are more readily transported by wind. Guy noted that he might have had a student in the past that might be familiar with those survey techniques, and said that this study would likely be less expensive than seed bank monitoring.

The TAC discussed mapping buffelgrass in the HCP planning area; Geoff agreed to look into the feasibility of identifying buffelgrass through remote sensing. Cathy suggested Sam Drake (University of Arizona Arid Lands Department). Guy suggested that Diego Valdez Zamudio, from Hermosillo, might have mapping expertise. Ann suggested

earmarking money for this task. Rich noted that a map could be useful in giving the City direction on priority areas to deal with. Jessica suggested talking with Aaryn Olsson (University of Arizona Arid Lands Department), because he is spearheading the buffelgrass mapping effort with the new CWMA, in addition to his thesis work. Leslie suggested that perhaps it would be the task of the CWMA to conduct a regional evaluation of the buffelgrass infestation, and then the TAC could see how this information relates to the HCP.

Ann distributed a handout to the TAC, "Proposal for Restoration Trials and Vegetation Monitoring on City of Tucson Avra Valley Land Buffelgrass Infestation Areas." She noted that, per Ralph Marra's (Tucson Water) request about the cost of the trials, she had crunched some numbers and came up with a total of \$13,582, assuming that City staff would do the work. She highlighted a few key points in the handout. She noted that restoration work would not be started during the first year of the buffelgrass eradication program, because any new plants would be killed by the herbicide. However, before the first round of spraying this year, Mark Briggs would need to do baseline monitoring work. She explained the vegetation habitat monitoring plan. Ann asked if AGFD has identified burrowing owls and burrows in this area yet. Leslie said that she has not heard back from Mike Ingraldi (AGFD). The TAC stressed that burrows need to be marked prior to spraying, in order to avoid damage to the burrows by blading. Also, it would be necessary to hand spray around the burrows, in order to avoid spraying herbicide directly into the burrows. Trevor noted that the area around burrows is usually devoid of vegetation anyways.

Leslie explained that Mima has been working with Marc Baker to design the Pima pineapple (PPC) and needle-spine pineapple (NSPC) cacti surveys in the expanded Southlands. She said that the plan is to survey what Marc believes will be high-density areas through polygon modeling. Leslie noted one change from Marc's earlier proposals, he is going to double the length of the survey transects. She also noted that, because there might be other sensitive cacti species reported from the planning area, such as Acuña and Nichol Turk's head, the scope has been expanded for Marc to look for these species, too. This will add approximately \$1,000 to the budget. She expects to see a draft proposal next week.

Trevor stressed that he is concerned about the City spending so much money to locate cacti individuals in the Southlands when future developers will probably opt for off-site mitigation anyway. Leslie admitted that this is a big problem, especially for Pima County, having set a 90 percent conservation goal for PPC, when in actuality, they have only been able to conserve 43 percent of individuals in the Sonoran Desert Conservation Plan (SDCP). Also, much of the PPC populations are on Arizona State Land Department (ASLD) lands. Pima County has been working with ASLD for years, in order to develop the conservation easements that they currently have. She noted that Sahuarita is not interested in selling land for conservation purposes. Trevor said that he does not think the USFWS mitigation ratio of 1:1 is acceptable; that a 4:1 ratio might engender on-site mitigation. Leslie explained that, with the conceptual land use planning progress made between the City and ASLD, there might be an opportunity for shifting development away from areas of good PPC habitat. Thus, the more information the City has about where the cacti are, the greater the opportunity to protect priority areas. Leslie noted that

further development in the Southlands is inevitable, and thus, losing PPC habitat there is a reality, so it is important to keep development denser near the interstates in order to conserve areas of good PPC habitat that exist at the periphery of the HCP project area.

b. Covered Activities in the proposed expanded HCP planning area

Leslie asked Cathy about burrowing owls in the expanded Southlands. Cathy said that she would check on the AGFD model of burrowing owl habitat and get back to the TAC. Trevor noted that it might be important to consider the canyon spotted and giant spotted whiptails. Leslie responded that she believed that the riparian areas were the only places where these species would occur. She added that surveys along Cienega Creek would answer many questions about other species for consideration. Trevor said that he would like to see the entire Cienega Creek complex surveyed, including Rincon Creek, Pantano Wash, and other wash systems in the area. Leslie noted the list of species that might be considered in the HCP due to the proximity of Cienega Creek. Trevor noted that USFWS is currently doing surveys in the Cienega Creek area this week. Leslie said that with the data from this survey and the cacti surveys, the City might be doing well in obtaining information, with the exception of lesser long-nosed bat. She asked the TAC if a bat foraging habitat survey should be conducted in this same area. She noted that Mima has done a limited survey of the area, looking for agaves. Leslie suggested that perhaps Marc could also look for agaves during the cacti surveys. Guy asked if anyone knows whether Huachuca water umbel is located in that area, and suggested maybe Marc should also look for it. Trevor noted that the BLM likely has surveyed for the plant in their nearby preserve; and that Pima County has also surveyed for it in the Cienega Creek Natural Preserve (Pricilla Titus surveys).

Trevor suggested surveying for desert tortoise in the Southlands sub-area. He noted that a petition to list the Sonoran population of the species was proposed last year, and that the official petition could happen soon. He explained that desert tortoise migrate between the Santa Rita and Rincon Mountains. He noted that the species was just added to the SDCP list, and that at recent SDCP meetings, experts have been discussing the importance of protecting lands between these paired ranges. Leslie noted that desert tortoise nest along Pantano Wash. Trevor suggested that if surveys are to be conducted, the crew should look for desert box turtles as well. Cathy said that she would check with Marty Tuegel (USFWS) about his data. Trevor said that the SDCP experts felt that a second important area for desert tortoise conservation was northwest of Tucson, in order to protect genetic diversity. He stressed that noting habitat is not very helpful, that connectivity and gene flow is critical to the survival of the species. Trevor volunteered to check with Cecil Schwalbe, and his graduate student Taylor Edwards. He suggested that Rincon Creek should be surveyed, and that Rocking K Ranch has been heavily surveyed, and perhaps the TAC could get a hold of those survey results.

Leslie noted that there are no immediate take concerns in the Santa Cruz River planning sub-area, but that at some point, Safe Harbor Agreements (SHAs) would need to be discussed in terms of restoration potential. Ann suggested that a map could be made showing the location of Phase I ESA findings, landfills, etc. Leslie noted that this map would need to be done for El Rio Medio. Leslie asked the TAC which important species they felt could be drawn into the Santa Cruz River planning sub-area as a result of

restoration work. Trevor thought that Mexican garter snake and Chiricahua leopard frogs could move in, at least as a result of flood events. He added that many avian species would likely use the river as a migration corridor, and suggested that at some point, bird surveys might be worthwhile. He noted that he recently observed narrow-mouthed toads during surveys.

Leslie asked the TAC to detail their sense of survey priorities, and suggested that the cacti surveys were important. Geoff suggested that the Cienega Creek background research and potentially new surveys appeared to be important. Guy suggested that Geoff do a literature review for research on the effect of Roundup herbicide on burrowing owls. Geoff mentioned that, in the research he already conducted, he found that the herbicide Rodeo would be expected to be less detrimental to all species because it lacks the surfactants that Roundup contains, which have been found to exhibit negative effects on many species of fish and amphibians. However, Trevor noted that, unfortunately, it is the surfactants that are most effective on plants. Guy suggested that any information on bioaccumulation on any terrestrial mammals would be helpful. Trevor noted that Phil Rosen (University of Arizona) is not concerned about the negative impacts from Roundup on toads, which many people suspect would be more susceptible to the effects of Roundup than burrowing owls. Geoff said that he would send out a summary of the information he found on current research on the impacts of Roundup. Rich said that he wants to keep concern over bioaccumulation on the table, because any time a chemical is introduced into the environment, the synergic effects need to be evaluated.

Leslie explained a map of the proposed expanded planning area that was shown to the TAC, including potential annexation areas. There are areas within the City that are environmentally sensitive, yet not included in the original HCP, for one of two reasons: either there were no listed species or sensitive species expected to result in take, or there was so much development in these areas that there was little connectivity to areas included in the HCP. The City prefers to focus its energy on areas with take concerns. The City has other options for regulating, or guiding, land use. One of the things that the City is looking at, is trying to identify environmentally sensitive areas that do not have take concerns, and then developing a set of policies that supersede the area plans that can provide guidance for land use in those areas. Leslie explained that the City is starting this planning process by reevaluating major riparian areas. She said that three main watersheds have been identified: Atterbury/Pantano washes, Agua Caliente/Tanque Verde washes, and the West Branch of the Santa Cruz River. She said that neighborhoods along the West Branch are worried about how future development would impact the mesquite bosque and their rural lifestyle. She said that the City is hoping to find a mechanism to protect this area through the General Plan. She explained that the best plan is to evaluate land use with a watershed perspective, and that Mayor and Council are interested in finding a way to accomplish HCP goals through another policy mechanism. She noted that Mayor and Council would have to approve the final expanded HCP boundary. Trevor asked if the City was considering including the Fagan and Petty Ranch watersheds at this point. Leslie said that the City is considering these washes as well.

Leslie asked the TAC if they had any suggestions or comments regarding the final annexation boundary lines. Ann asked why other important riparian areas, like the Rillito

River, are not included as “ecological and cultural resource protection areas.” Leslie responded that Pima County and Tucson Electric Power own much of the riverbed. Also, many of these larger riparian areas are not currently included because they are either already enveloped in development, are already included as part of a restoration area, or are already protected through the City’s wash ordinances. She added that the wash ordinances are being revised to be envelope driven, including habitat features. Trevor asked why the western edge of the Southlands was not included on the map. Leslie noted that most of that area is already developed.

Leslie passed out the Bill Shaw “Shaw” map. Trevor noted that he spoke to Bill about the map, and said that Bill feels that the map still does a good job of capturing land uses and impacts to habitat. Leslie said that the map provides a guideline for developers to think about impacts to their property in a larger context. She said that the City considers this map when adding new washes into the wash ordinances. Trevor noted that Pima County asks developers in their Biological Inventory Report (BIR) to map their parcel on this map, and that this is not included in the City’s Environmental Resource Report (ERR). Leslie agreed, but said that the ERR does require applicants to evaluate vegetation communities and any nearby ERZ and WASH protected washes. She noted that if there is a wash on or near the parcel that is not covered by one of the City’s wash ordinances, or if the vegetation was mapped incorrectly, then the City can ask the developer to address the wash in more detail in the ERR. Trevor asked if there are any limestone outcrops in the southern Tucson Mountains. None of the TAC members knew for certain. Trevor then asked about the possibility of Black Wash being protected by the City wash ordinances. Leslie said that the City could not include it until that land is annexed, and her thoughts were that the area is not likely a high priority for annexation currently, and Ries agreed. Ann noted that this area is a political hot spot, because Marana is considering building a treatment plant in this area and Pima County has begun to purchase land there.

Leslie mentioned the suggestion to construct a loop road through Avra Valley, however there are many concerns with the idea. She noted that a landowner in the area is pushing the idea and that transportation directors are considering the feasibility of the idea. Ann noted that if the City annexes land in this area, it would have a greater voice in the new road discussion. Leslie said that she would try to include a timeframe on the maps that details the annexation priorities. She mentioned that land to the southeast would likely be a priority for the City within the next fifty years.

c. New and Proposed Target Species

Leslie explained the new target species, noting that the six species accounts represent those that were evaluated and dismissed in the previous HCP selection process, now likely to occur in the expanded planning area. She explained that the City asked SWCA to go ahead and prepare draft species accounts. Leslie explained that the purpose of the meeting is for the TAC to give SWCA guidance. Trevor suggested adding the Sonoran population of desert tortoise to the list, and preparing a draft species account. Linwood asked about the pocket bat. Leslie noted that she is interested to see if there is any habitat overlap for the pocket bat with lesser long-nosed bat and pale Townsend’s big-

eared bat. Trevor suggested that cotton rat should stay on the list. Leslie said that SWCA could prepare species accounts for the four species that have unclear listing status. Leslie said that lesser long-nosed bat and yellow-billed cuckoo would definitely be included in the target species list due to habitat in Cienega Creek.

4) Call to the Public

No members of the public spoke up.

5) Next Steps/ Future Meetings

The next TAC meeting is scheduled for July 18, from 9am to noon. Leslie asked the TAC to email comments on the draft species accounts to Geoff directly. She said that the main topics on the agenda would be: a presentation on El Rio Medio, based on the fieldtrip that several people attended on June 9; final recommendations for the expanded planning area and additional target species; and then the general discussion will turn back to focusing on the Avra Valley planning sub-area.